

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/698,201	KIM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kim-Kwok CHU	2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 4/11/2006.
2. ☒ The allowed claim(s) is/are 1,2,4,6,37,30,31,33,32,34,35,3,5,36,7,38,8,39,9,10,12,14,40,42,11,41,13,17,19,15,16,43,18,20,21,44,45,22,24,23,25,26,46,48,47,27,29,28 and 49-82 which are renumbered as 1-82 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

**Allowable Subject Matter**

1. Claims 1-82 are allowable over prior art.

2. The following is an Examiner's statement of reasons for the indication of allowable subject matter based on Applicant's Amendment filed on April 11, 2006:

Regarding claims 1, 9, 15, 20, 25, 50, 61, 71 and 75, the prior art of record considered as a whole fails to teach or suggest an optical system for an optical pickup having a collimating lens including a diverging lens with diverging power and a focusing lens with focusing power comprising the limitation where the collimating lens satisfies the relationship -  $1.5 > f/f_n$ , where  $f$  is a total focal length of the collimating lens, and  $f_n$  is a focal length of the diverging lens.

Regarding claim 49, the prior art of record considered as a whole fails to teach or suggest an optical pickup having a light source to generate a first light beam within a range of wavelengths under 500 nm for use with recording and/or reproducing with respect to a first medium and a second light beam with a wavelength outside of the range and which is roughly 650 nm for use with recording and/or reproducing with respect to a second medium other than the first medium; a collimating lens arranged in an optical path between the light source and the

optical element, the collimating lens having a diverging lens with a diverging power sufficient to allow the optical element be capable of focusing the first light beam for each of the wavelengths within the range onto the first medium with negligible aberration, and focusing the second light beam with the wavelength of roughly 650 nm onto the second medium with negligible aberration.

Regarding claim 60, the prior art of record considered as a whole fails to teach or suggest an optical pickup having light sources to emit respective light beams of different wavelengths, wherein one of the wavelengths is within a range that is less than roughly 500 nm and another one of the wavelengths is more than roughly 500 nm; an optical element to focus the light beams onto respective media; a collimating lens with a diverging power arranged between the light sources and the optical element; and the diverging power is sufficient to allow the optical pickup to focus the one light beam for each of a plurality of wavelengths within the range below 500 nm onto the respective medium with negligible aberration and also to allow the optical pickup to focus the another light beam having the wavelength above roughly 500 nm onto the respective medium with negligible aberration.

Regarding claim 74, the prior art of record considered as a whole fails to teach or suggest an optical pickup having light sources to emit a light beams having a wavelength within a range

under 500 nm and another light beam having a wavelength suitable for recording and/or reproducing data with respect to a digital versatile disc; an optical element to focus the another light beams onto respective media; a collimating lens with a diverging power arranged between the light sources and the optical element; and the diverging power is sufficient to allow the optical pickup to focus the one light beam for each of a plurality of wavelengths within the range below 500 nm onto the respective medium with negligible aberration and also allow the optical pickup to focus the another light beam onto the digital versatile disc with negligible aberration.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

3. Claims 2-8, 10-14, 16-19, 21-24, 26-48, 51-59, 62-70, 72, 73 and 76-82 are allowed with their respective parent claim.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch, can be reached on (57) 272-7589.


The fax number is:

(571) 273-8300 (for formal communications intended for entry. Or:


(571) 273-7585, (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

  
THANG T. TRAN  
PRIMARY EXAMINER

Kim-Kwok CHU



Examiner AU2627  
May 23, 2006

(571) 272-7585